

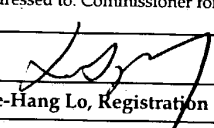
PATENT



IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

14

APPLICANTS: Millard E. Sweatt III, et al.
SERIAL NO.: 09/925,109
FILING DATE: August 8, 2001
TITLE: Method & System for Remote Television Replay Control
EXAMINER: Unknown
GROUP ART UNIT: Unknown
ATTY. DKT. NO.: 22407-03951

| CERTIFICATE OF MAILING | | | |
|--|--|--------|--------------|
| I hereby certify that this correspondence, including the enclosures identified above, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Box MISSING PARTS, Washington, D.C. 20231 on the date shown below. | | | |
| Signature: |  | | |
| Typed or Printed Name: | Sze-Hang Lo, Registration No. 48,388 | Dated: | Nov. 9, 2001 |

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LETTER TO THE CHIEF DRAFTSPERSON

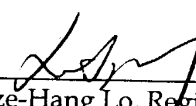
SIR:

Please substitute the enclosed 34 sheets of formal drawings containing Figures 1- 31 for the 31 sheets of drawings containing Figures 1-31 previously submitted.

Respectfully submitted,
MILLARD E. SWEATT III, ET AL.

Dated: November 9, 2001

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22407/05391/SF/5062447.1

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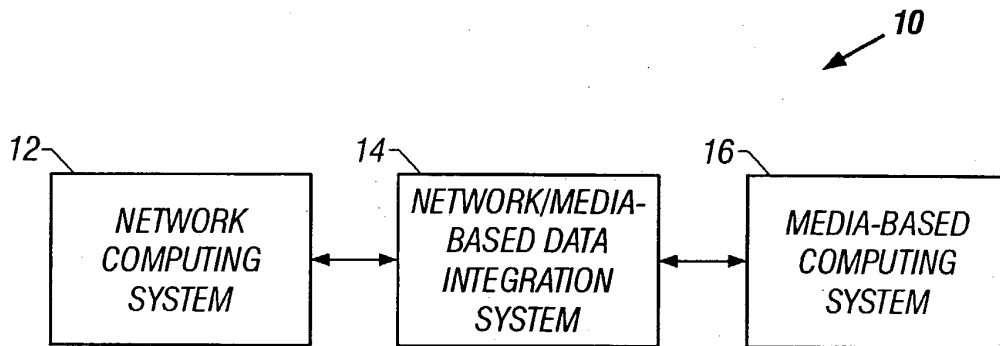


FIG. 1A

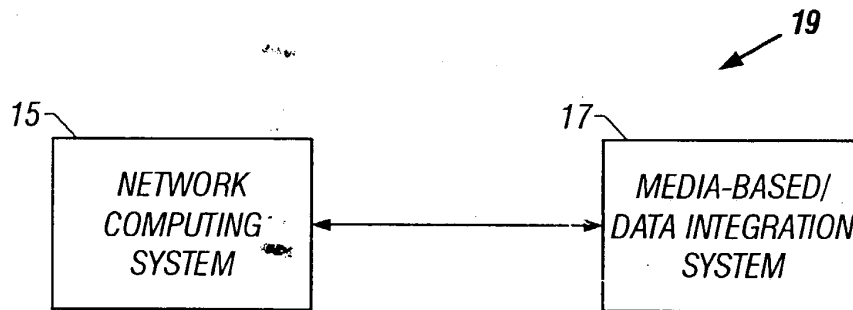
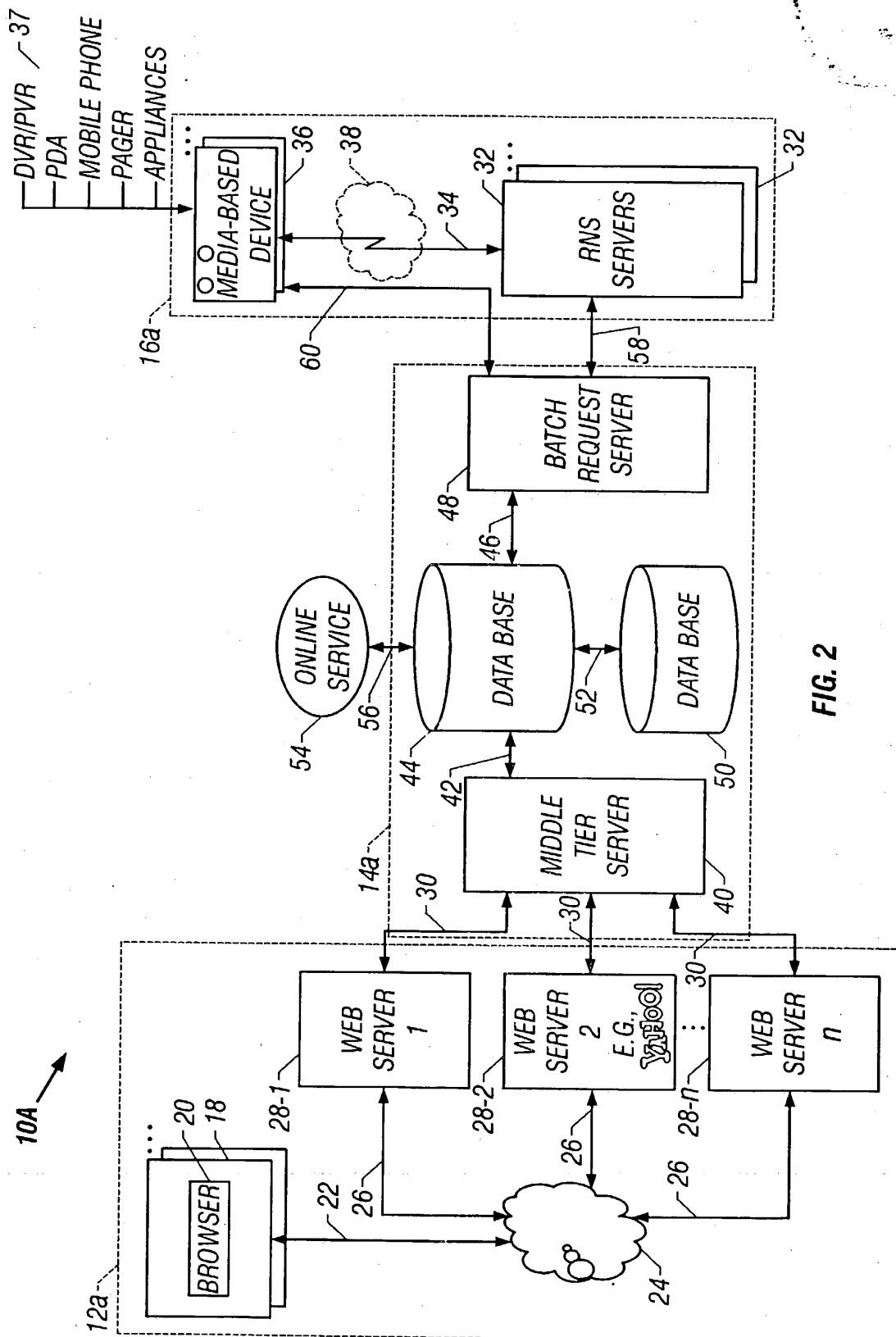


FIG. 1B



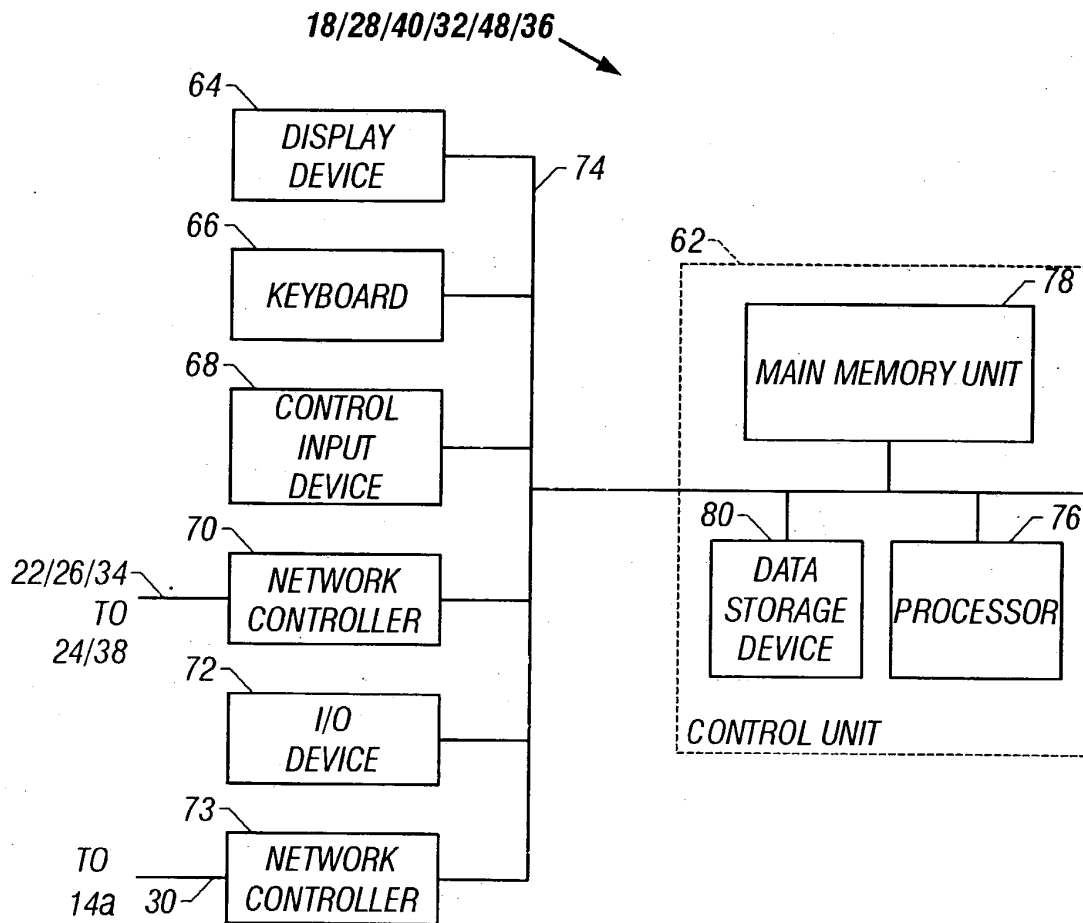


FIG. 3

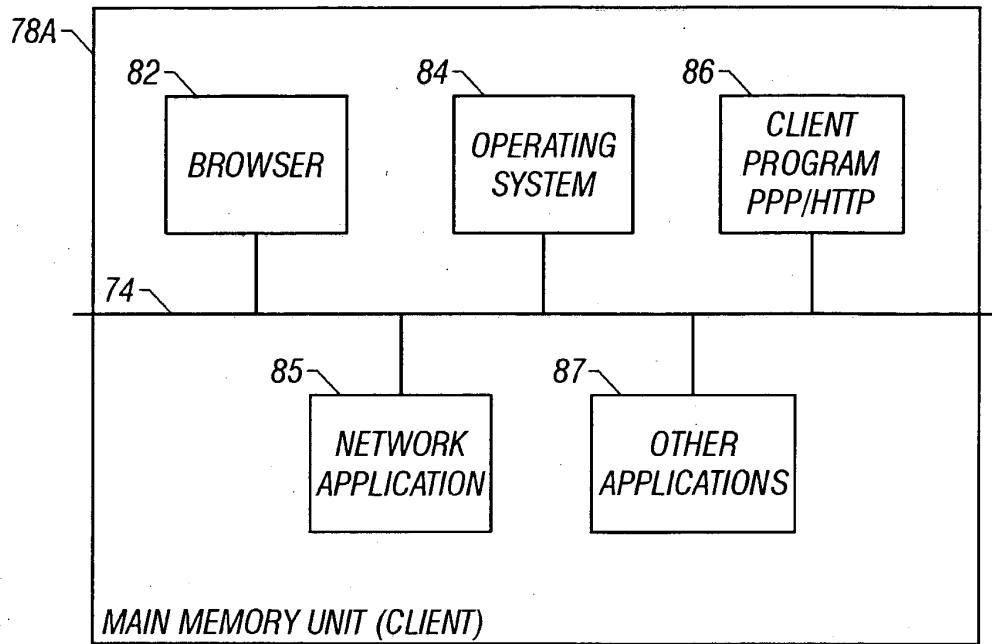


FIG. 4A

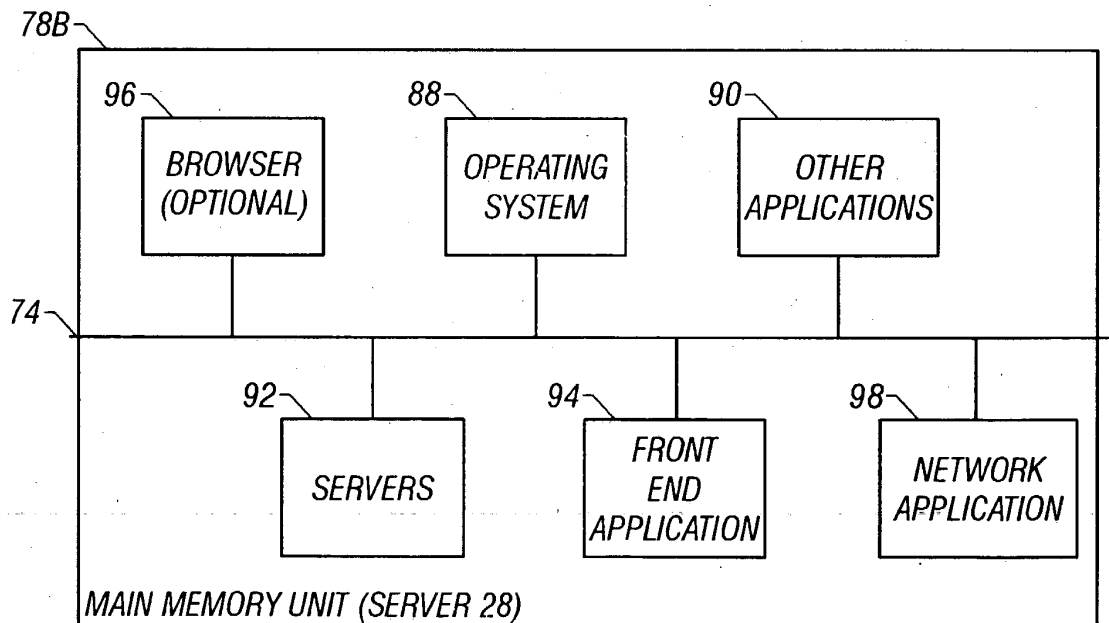


FIG. 4B

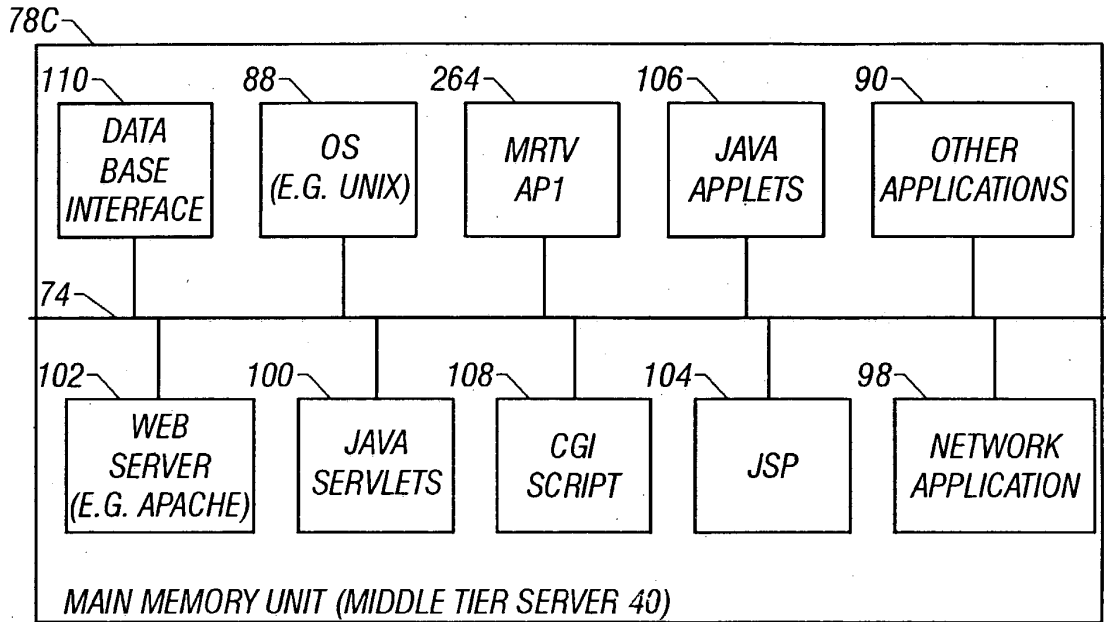


FIG. 4C

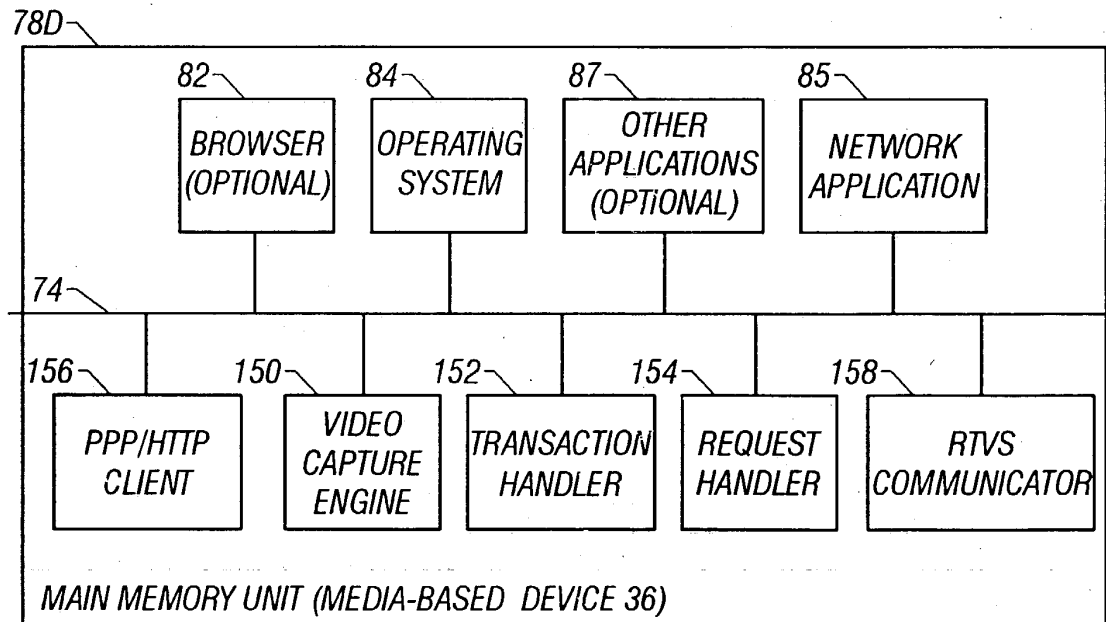


FIG. 4D

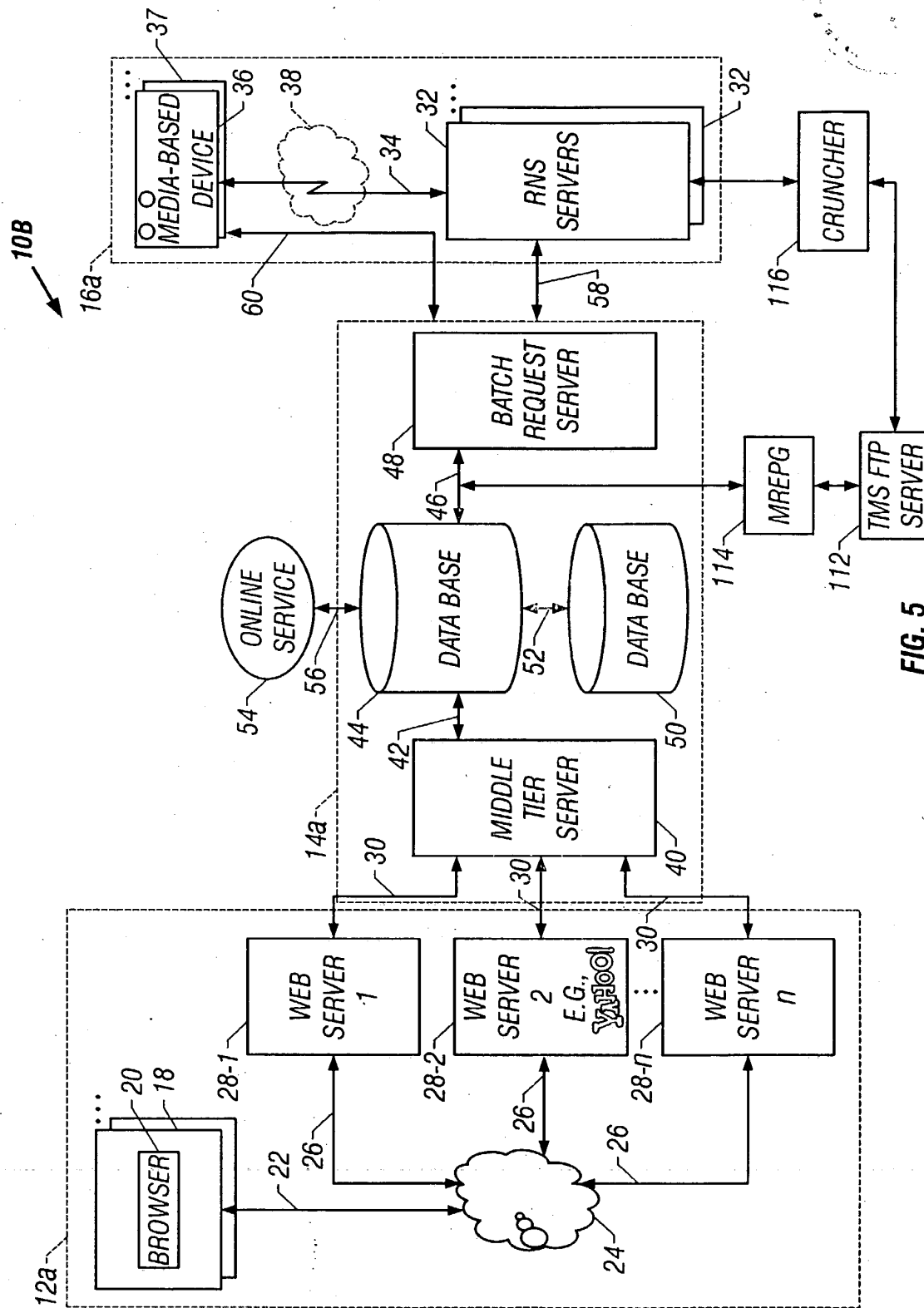


FIG. 5

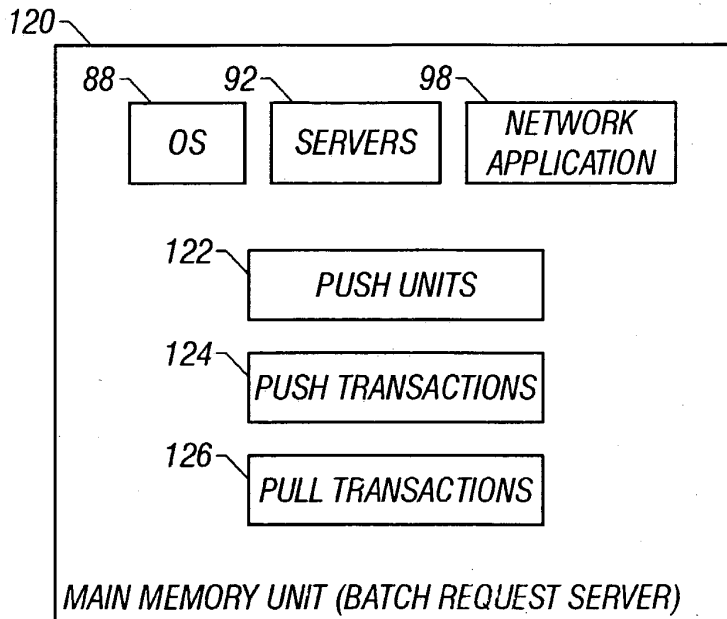


FIG. 6

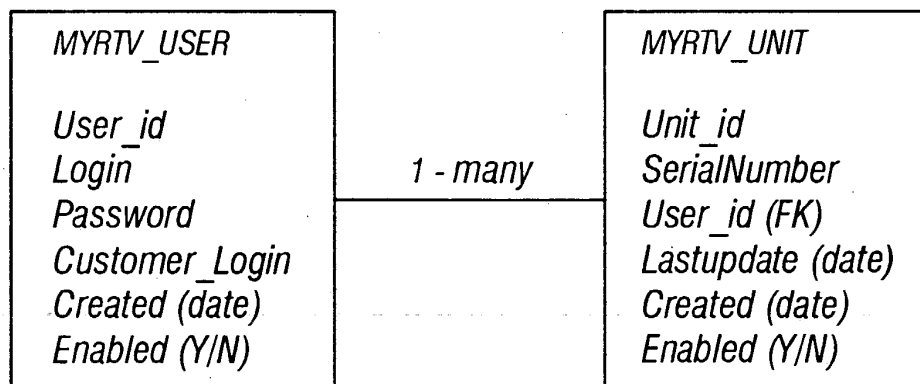


FIG. 7

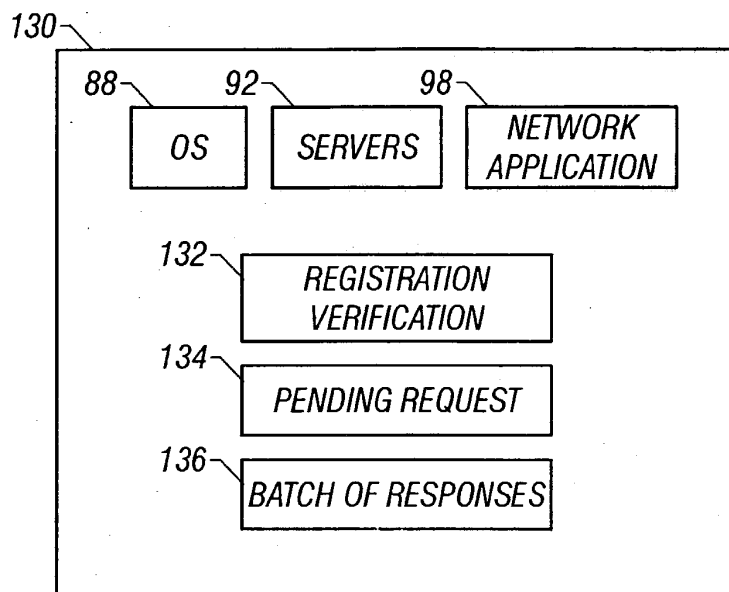


FIG. 8

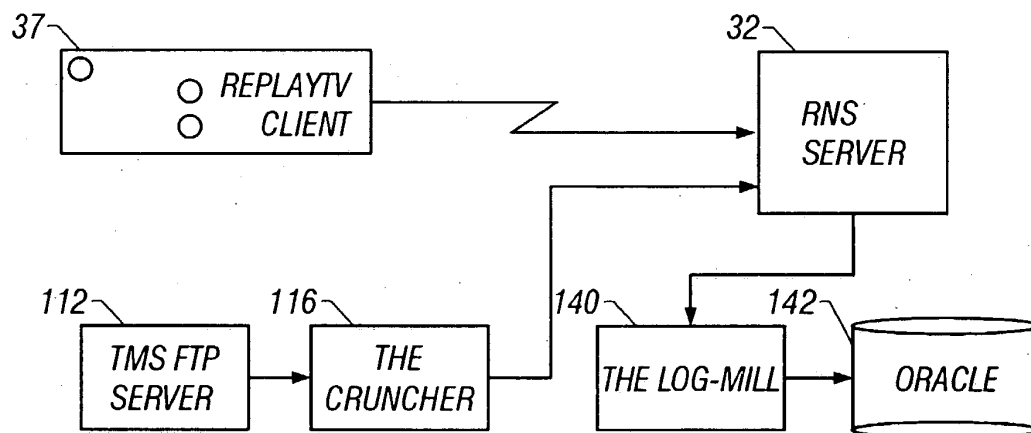


FIG. 9

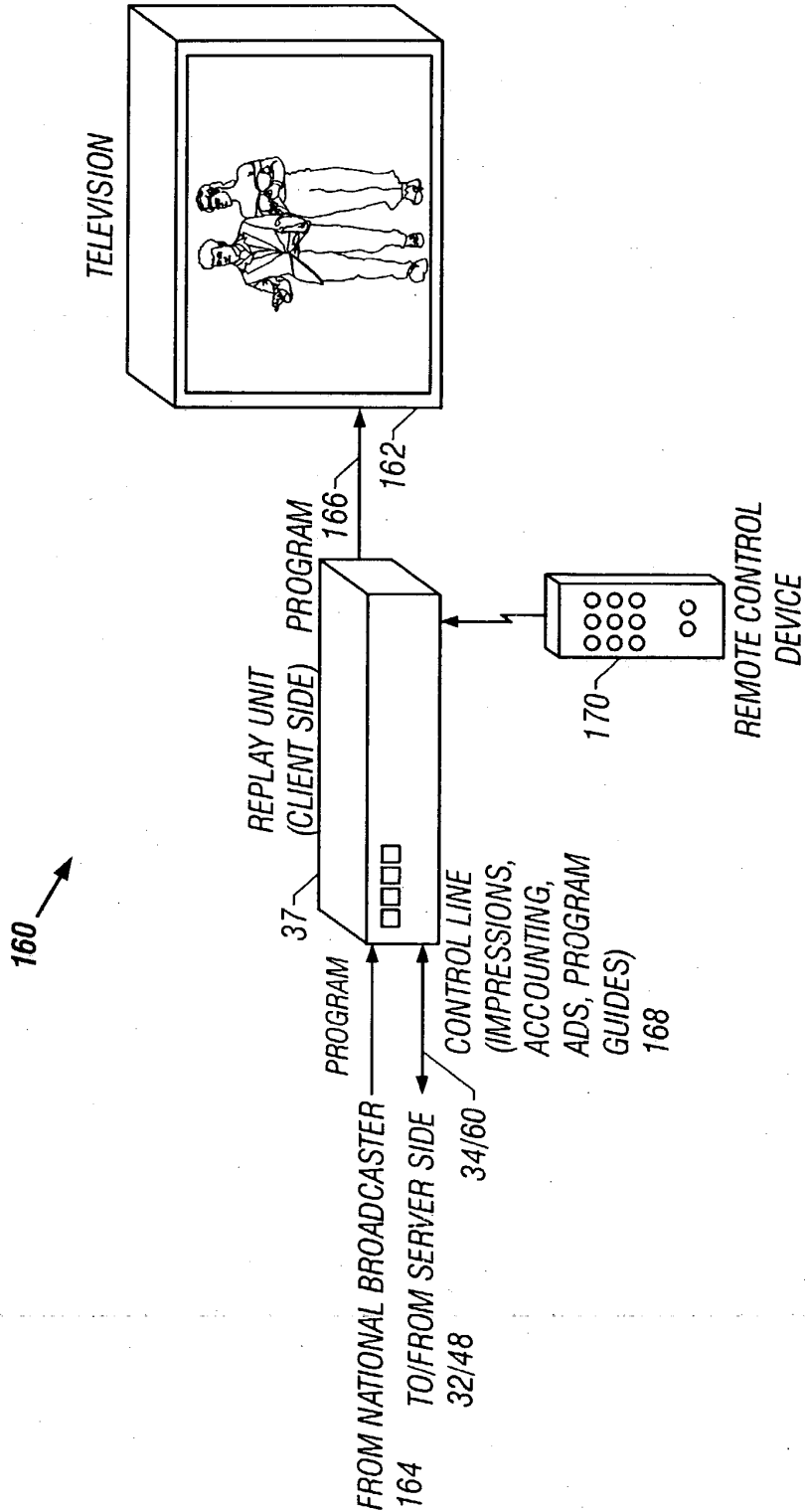


FIG. 10

my replaytv

Marketing/promotional information

user name:

[Sign on](#)

182

password:

184

☐ remember my password

[I forgot my password](#)


[Register](#)

Are you a new user to the myreplaytv webase?

[Help](#) [Contact us](#)

FIG. 11

[Preferences](#) [Help](#) [Logout](#)

my  replaytv

[Channel Guide](#)
[Replay Guide](#)
[Find Shows](#)
[Manual Record](#)

Channel Guide

195 197 194 196 198 200

Today 03/06 6 pm 0 OXYGEN GO

| | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM |
|--|----------------------------|-----------------|-----------------------------|-----------------|
| 204 0 OXYGEN | An Officer and a Gentleman | | | |
| 1 IN1 | Me, Myself & Irene | | Scary Movie | |
| 2 KTVU | 6 O'Clock Ne... | Spin City | Seinfeld | Spin City |
| 3 LOOR003 | Local Origination | | Local Origination | |
| 4 KRON | NewsCenter 4 at 6 | | Frasier | Entertainmen... |
| 5 KPIX | CBS News | Channel 5 Ey... | Evening Maga... | Hollywood Sq... |
| 6 KICU | Home Improve... | The Nanny | Family Feud | Family Feud |
| 7 KGO | ABC 7 News at 6pm | | Jeopardy! | Wheel of For... |
| 8 KTSF | TV Patrol | Balita... | Little Saigo | Mandarin New... |
| 9 KQED | Zoboomafoo | Nightly Busi... | The NewsHour With Jim Le... | |
| 10 KTEH | BBC World Ne... | French Field... | Antiques Roa... | EastEnders |
| 11 TVGOS | TV Guide | | TV Guide | |
| 12 KBHK | The Simpsons | 3rd Rock Fro... | Friends | Friends |
| 13 KBWB | The Drew Car... | Divorce Cour... | Power of Att... | The Drew Car... |
| 14 KDTV | Noticias 14 | Noticiero Un... | Carita de Angel | |

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[FAQ](#)

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FIG. 12A

| | | | | |
|-------------------------|-------------------------|----------------|--------|---------|
| View Description | 2 KTUU ▽ | Yesterday 8/17 | 4 PM ▽ | 1-15 ▽ |
| Record | 4 KRON | Today 8/18 ▽ | 5 PM | 16-30 |
| Record all episodes | 5 KPIX | SAT 8/19 | 6 PM | 31-45 |
| Record + change options | 6 FAM | SUN 8/20 | 7 PM | 46-60 |
| Find all episodes | 7 KGO | MON 8/21 | 8 PM | 61-75 |
| Close | 8 KRCB | TUE 8/22 | 9 PM | 76-90 |
| 218 | 9 KQED | WED 8/23 | 10 PM | 91-105 |
| View Description | 10 KDTV | THU 8/24 | 11 PM | 106-120 |
| Find all episodes | 11 KICU | FRI 8/25 | 12 AM | 121-145 |
| Turn off recording | 12 KBHK | 212 | 214 | 146 |
| Change record options | 13 KBWB | | | |
| Close | 14 CNN | | | |
| 220 | 15 DISN | | | |
| | 16 QV | | | |
| View Description | 210 | | | |
| Record | Record | | | |
| Record all episodes | Record future episodes | | | |
| Record + change options | Record + change options | | | |
| Find all episodes | Find all episodes | | | |
| Close | Why can't I record? | | | |
| 218 | Close | | | |
| View Description | 222 | | | |
| Find all episodes | | | | |
| Turn off recording | | | | |
| Change record options | | | | |
| Close | | | | |
| 220 | | | | |

FIG. 12B

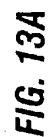


FIG. 13A

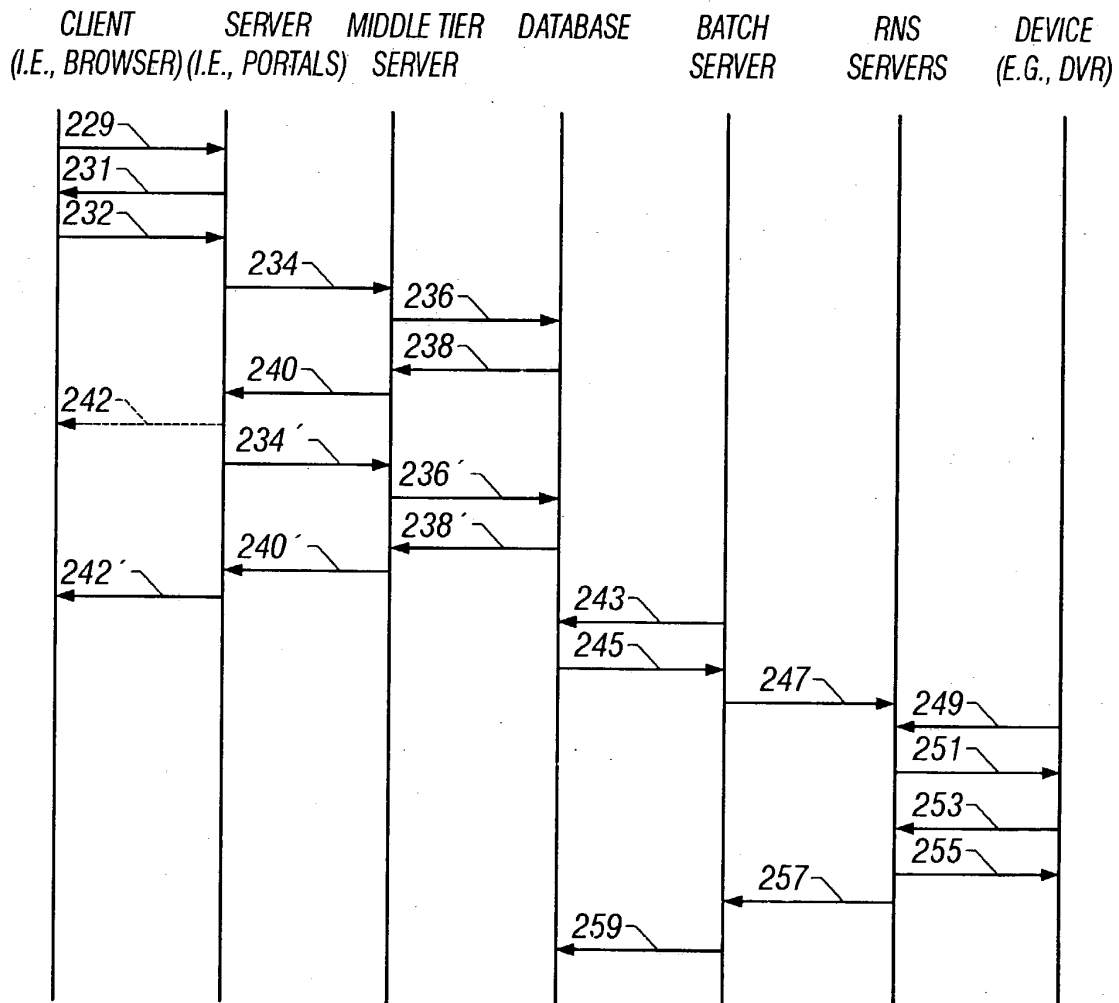
SEQUENCE DIAGRAM

FIG. 13B

| API Routine | Function |
|------------------|--|
| CreateAccount | Creates an account for a new user based on the information received |
| Login | Tries to authenticate a user based on the input username and password combination |
| GetProfile | Returns the profile of the user and his units based on his userid |
| AddRequest | Adds a request to the unit's list of pending requests based on a set of request parameters, and returns the full status of the unit and of the pending requests, including those for recording specified show(s) and deleting recorded show(s) |
| DeleteRequest | Delete a request from the user list of pending requests |
| GetReplayGuide | Returns the Replay Guide of the unit as saved in the appropriate database for the specified unit |
| GetChannelLineUp | Returns the channel lineup of the unit based on the unit's setting |
| ChangePassword | Lets the user changes his password |
| GetEPG | Returns the current electronic program guide for the unit based on the settings of the unit |
| ShowGuide | Returns detailed information about a specified show or search show details for particular shows based on criteria given as parameters |

FIG. 14

| API Routine | Input Parameters | Output Files (Corresponding XML elements) |
|------------------|--|---|
| CreateAccount | firstname, lastname, address1, address2, city, state, zipcode, serialnumber, login, password, creator | ACCOUNT.XML REPLAYERERROR.XML |
| Login | login, password | ACCOUNT.XML REPLAYERERROR.XML |
| GetProfile | userid | PROFILE.XML (USERINFO, UNITINFO-I) REPLAYERERROR.XML |
| AddRequest | userid, unitid, reqtype(none, show, theme, update) <u>reqtype=show</u> : showtype(single, repeat, manual single, manual repeat), headendid, trnsid, device, starttimegmt, name, durationinminutes, inputsource, quality, guaranteedrecord, numepisodes, weekdayflags, earlstartminutes, showguarminutes <u>reqtype=theme</u> : searchterm, searchflags, suzukiid, durationinminutes, quality, guaranteedrecord <u>reqtype=update</u> : updatetype(deleteshow, preserveshow, deletechannel), channelid, showid | UNITSTATUS.XML (UNITINFO, REQUESTSTATUS-I) REPLAYERERROR.XML *Note: REQUESTSTATUS Result:=(PENDING, SENT, SUCCESS, GENERAL FAILURE, SCHEDULEFAILURE, ROOMFAILURE) |
| DeleteRequest | userid, unitid, requestid | DELETERESULT.XML REPLAYERERROR.XML |
| GetReplayGuide | userid, unitid | GUIDE.XML (REPLAYCHANNEL-I) REPLAYERERROR.XML *Note: REPLAYCHANNEL Type:=(SINGLE, SINGLEMANUAL, REPEAT, REPEATMANUAL, THEME, THEMEEXACT, ZONE) |
| GetChannelLineUp | userid, unitid | CHANNELLINEUP.XML (CHANNEL-I) REPLAYERERROR.XML |
| ChangePassword | userid, currentpassword, newpassword | ACCOUNT.XML REPLAYERERROR.XML |
| GetEPG | userid, unitid, starttimegmt, durationinminutes, startchannel, channelcount | XML file based on tvguide.dtd & tvprograms.dtd REPLAYERERROR.XML |
| ShowGuide | userid, unitid, query, start, count, levelofdetail *Note: query keywords include actor, advisory, desc, mpaa rating, title, etc. | XML file based on tvguide.dtd & tvprograms.dtd REPLAYERERROR.XML |

FIG. 15

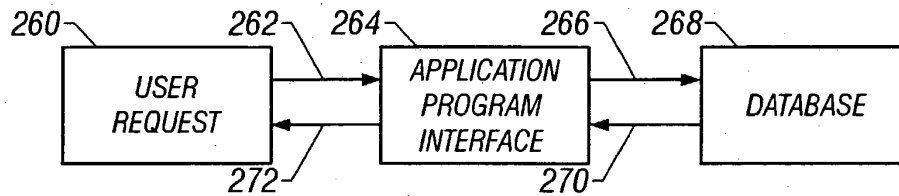


FIG. 16A

460

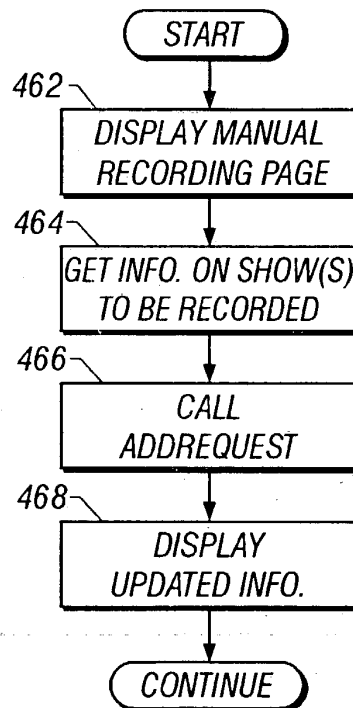


FIG. 25

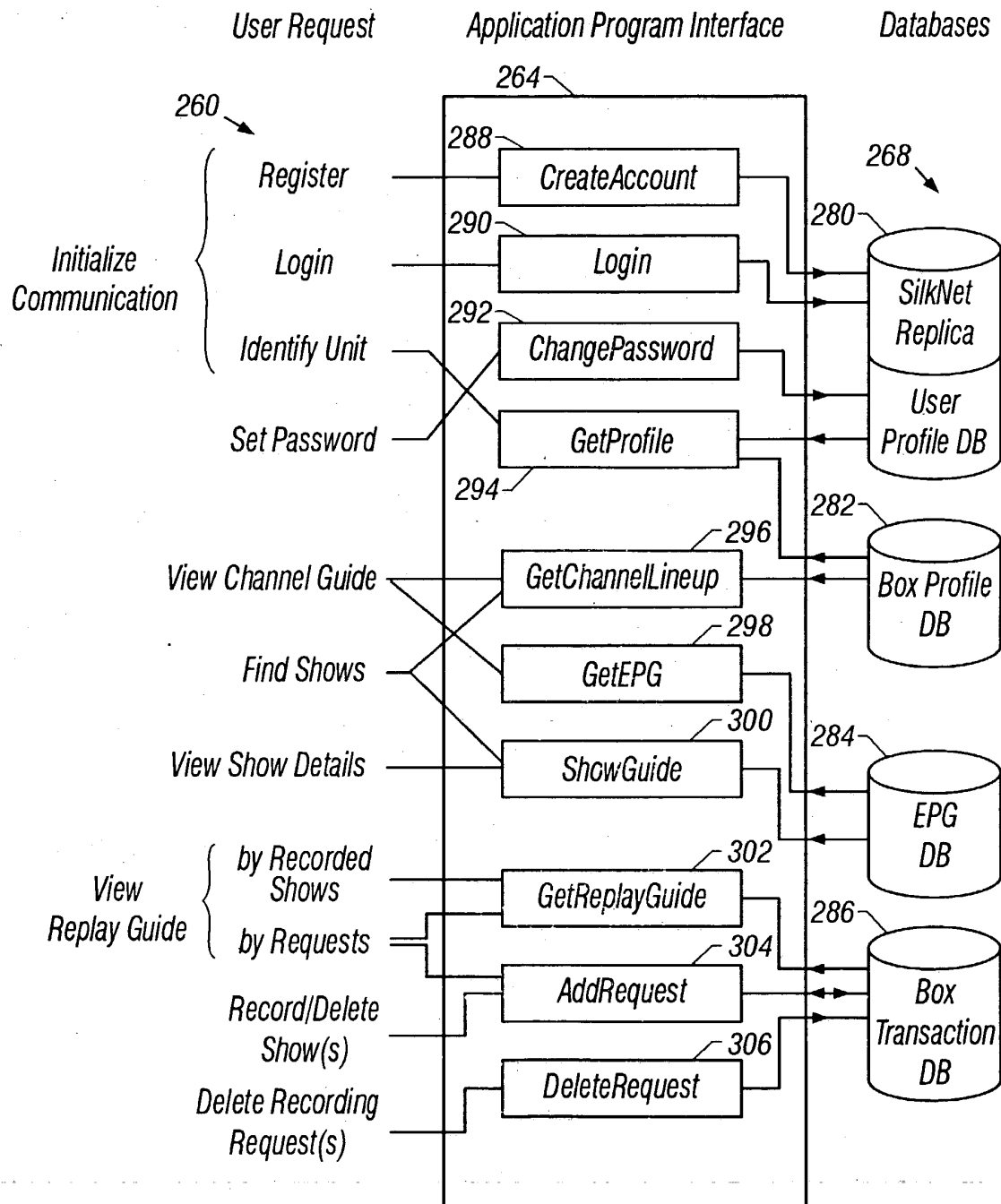


FIG. 16B

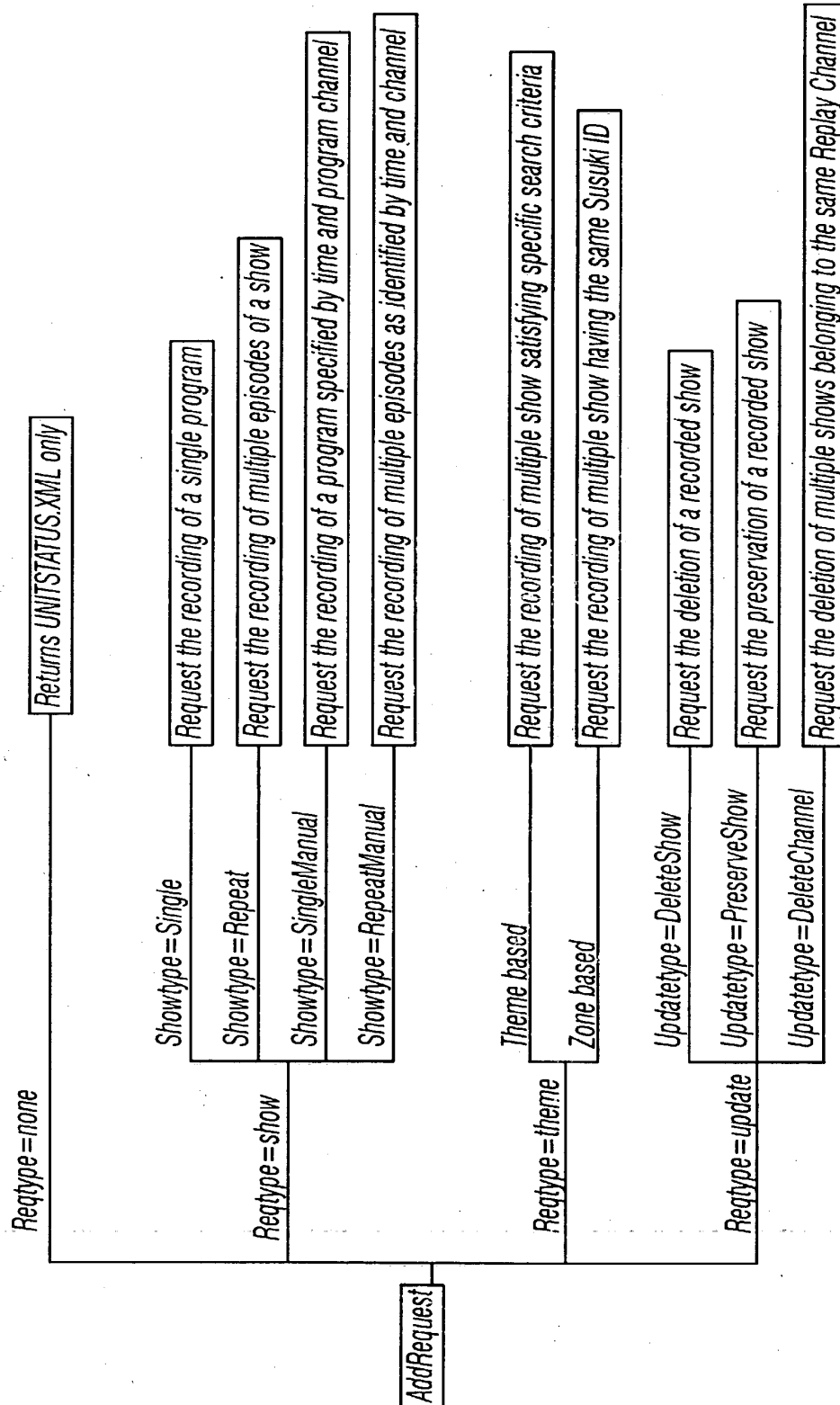


FIG. 17

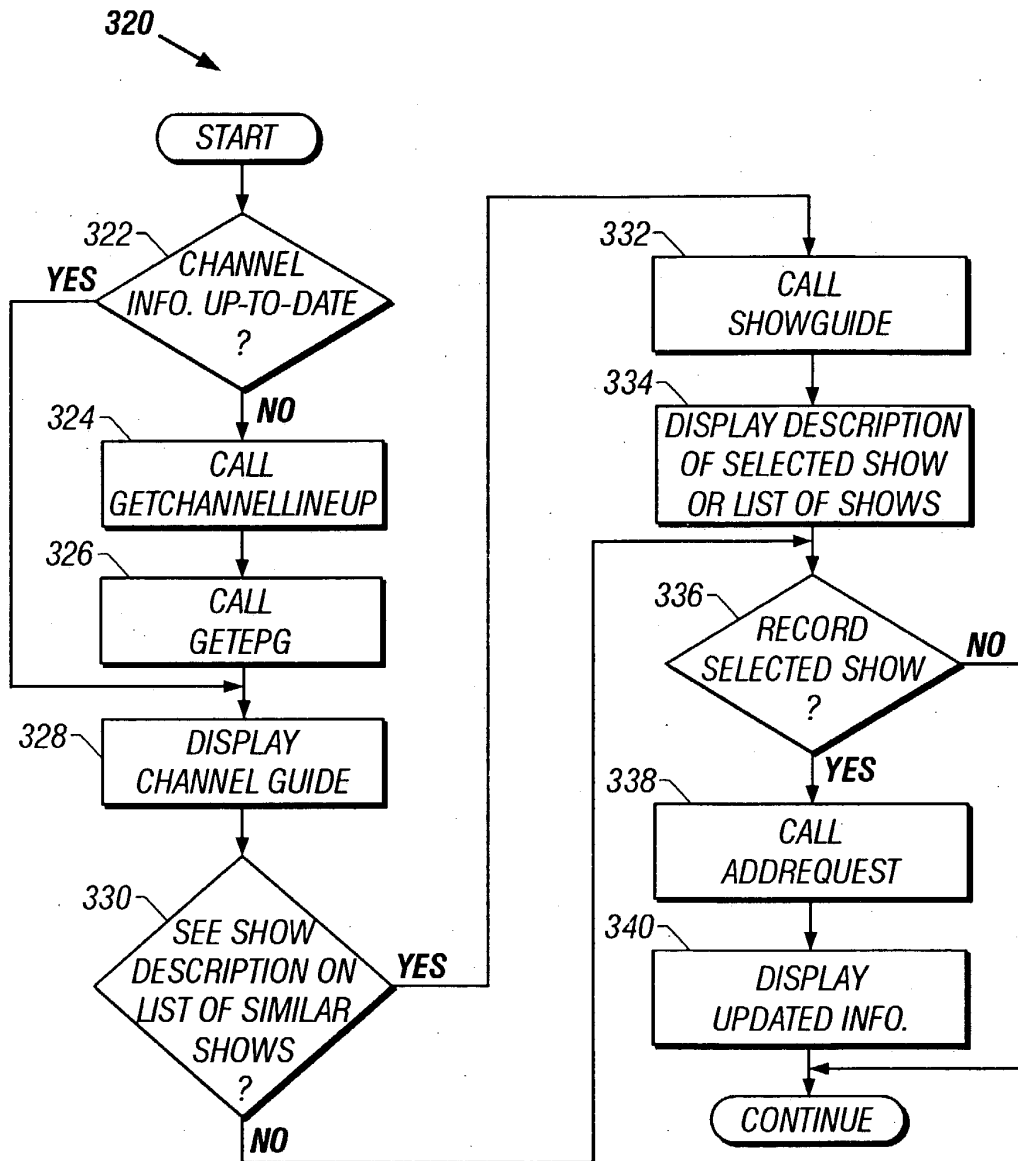
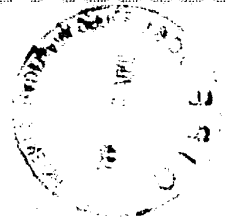



FIG. 18

my  replaytv


[Preferences](#) [Help](#) [Logout](#)

[Channel Guide](#) [Replay Guide](#) [Find Shows](#) [Manual Record](#)

Replay Guide

[Replay Shows](#) [Replay Channels](#) 350

Review and edit your one time and recurring Replay TV requests

 [Delete Selected Channels](#)

| Channel | Details | Status | Request Date |
|---|--|--------|--------------|
| <input type="checkbox"/> A Fistful of Dollars | This single record Replay channel was scheduled to record A Fistful of Dollars from Channel 21(TBS) on Sun, 02/18 at or around 7:00AM - 9:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record. | | 02/18 |
| <input type="checkbox"/> Blown Away | This single record Replay channel was scheduled to record Blown Away from Channel 42(USAP) on Tue, 01/16 at or around 9:00PM - 11:30PM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record. | | 01/16 |
| <input type="checkbox"/> Cantonese News | This show-based Replay channel will continuously record the 1 most current episode(s) of Cantonese News occurring every (Sun, Mon, Tue, Wed, Thu, Fri, Sat) on Channel 8(KTSF) at or around 8:00PM - 9:00PM. Guaranteed at EXTENDED quality. | | 02/28 |
| <input type="checkbox"/> Captain January | This single record Replay channel was scheduled to record Captain January from Channel 49(AMC) on Tue, 01/09 at or around 3:30AM - 5:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record. | | 01/09 |

FIG. 19A

Channel Guide

Replay Guide

Find Shows

Manual Record

Preferences

Help

Logout

Replay Guide

Replay Shows

Replay Channels

350

Review and edit recordings saved to your Replay TV unit

Delete Selected Channels

| Channel | Show Title/Episode | Date/Time | Station | Duration | Size |
|------------------------------|---|---------------|---------|----------|--------|
| A Fistful of Dollars | <input type="checkbox"/> A Fistful of Dollars | 02/18 7:00AM | 21 TBS | (2h) | 6.46% |
| Blown Away | <input type="checkbox"/> Blown Away | 01/16 9:00PM | 42 USAP | (2h 30m) | 8.07% |
| Captain January | <input type="checkbox"/> Captain January | 01/09 3:30AM | 49 AMC | (1h 30m) | 4.84% |
| Firewalker | <input type="checkbox"/> Firewalker | 02/27 8:00PM | 21 TBS | (2h) | 6.46% |
| On Deadly Ground | <input type="checkbox"/> On Deadly Ground | 01/07 9:00PM | 4 KRON | (2h) | 6.46% |
| Platoon | <input type="checkbox"/> Platoon | 02/04 8:00PM | 37 TNTP | (2h 30m) | 8.07% |
| The Bridge on the River Kwai | <input type="checkbox"/> The Bridge on the River Kwai | 12/24 8:00AM | 42 USAP | (3h 30m) | 11.30% |
| The Little Princess | <input type="checkbox"/> The Little Princess | 12/26 4:15AM | 49 AMC | (1h 45m) | 5.65% |
| The Trouble with Harry | <input type="checkbox"/> The Trouble with Harry | 12/18 1:05PM | 49 AMC | (1h 55m) | 6.19% |
| Welcome to ReplayTV | <input type="checkbox"/> Welcome to ReplayTV | 09/08 10:49AM | | (15m) | 2.42% |

FIG. 19B

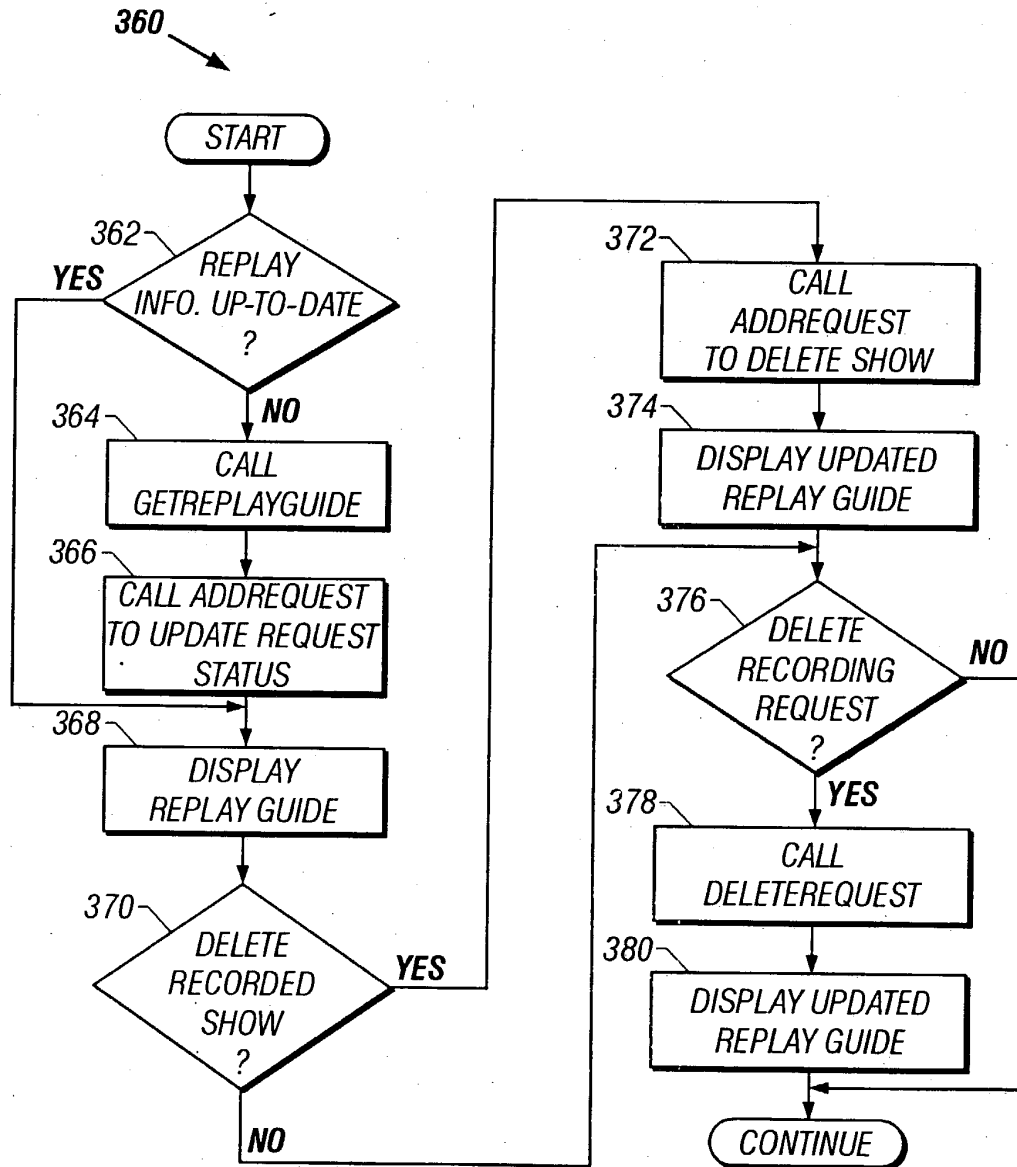


FIG. 20

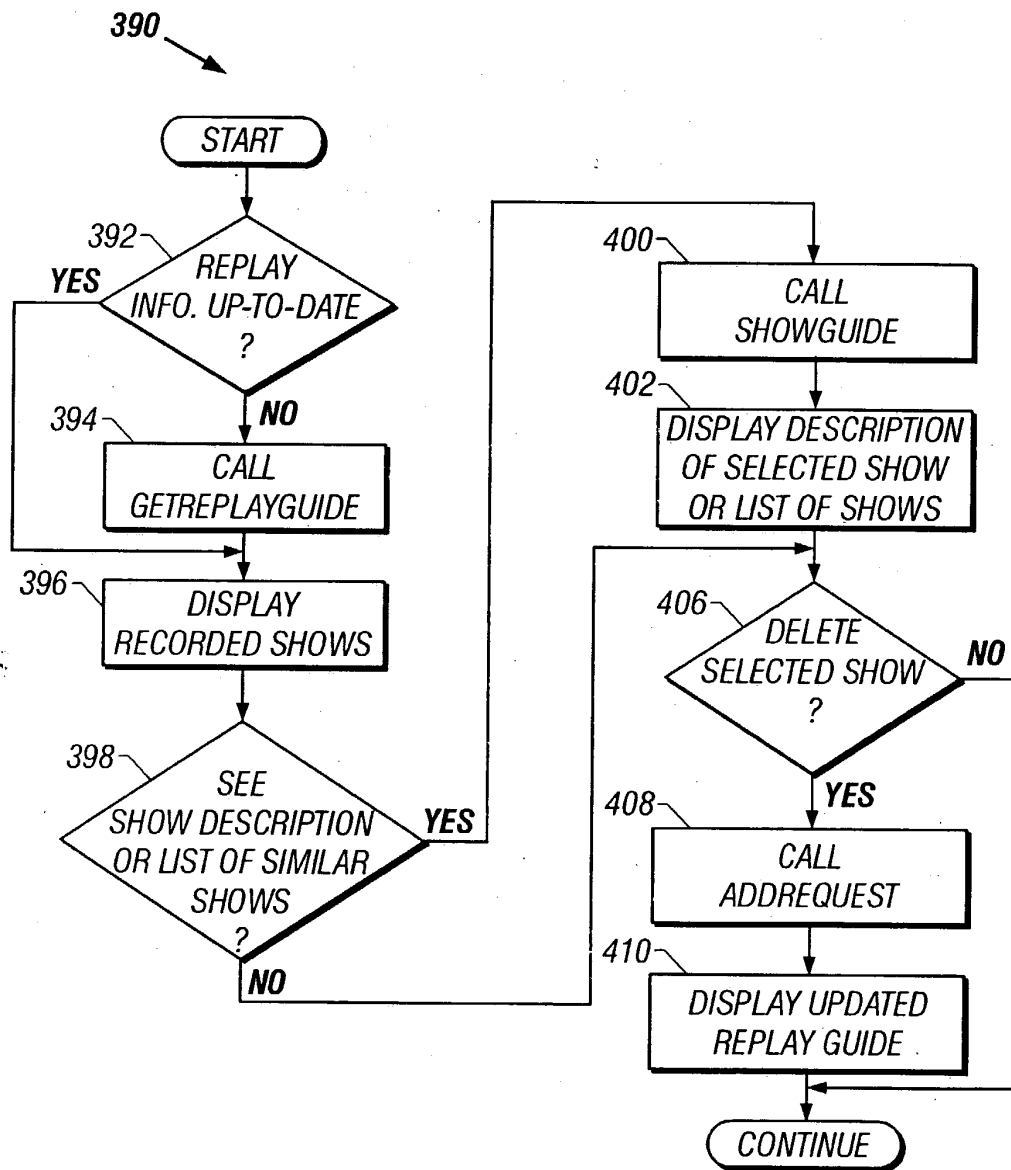


FIG. 21

my r replaytv

Find Shows

Preferences Help Logout Channel Guide Replay Guide Find Shows Manual Record

Find:

Enter the word or phrase that you wish to find.

☒ Show Titles ☐ Actors ☒ Descriptions ☐ Directors

in these categories:

Find Shows

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FIG. 22

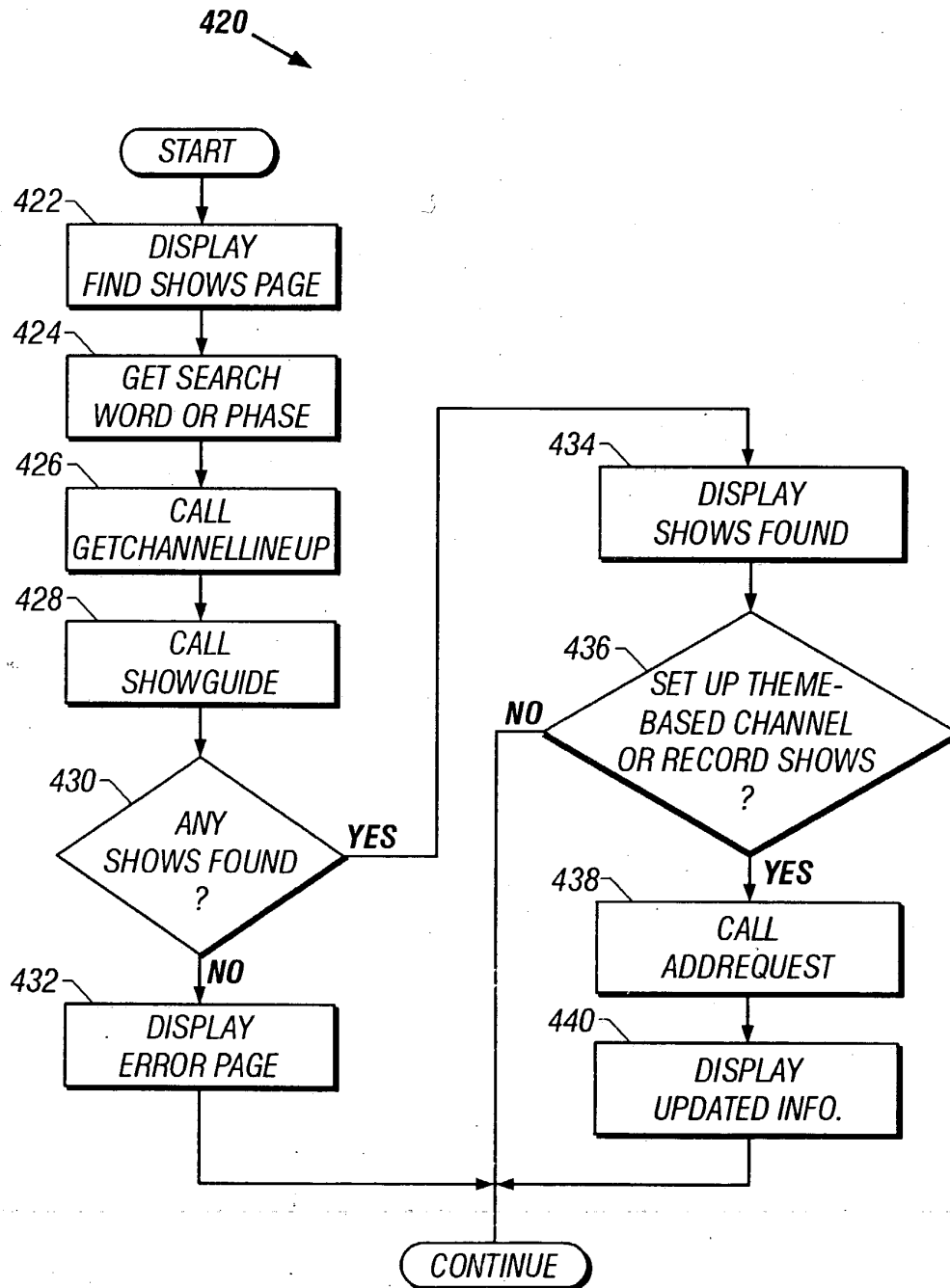



FIG. 23

| | | | | |
|--|----------|------------------|--------------|-----------------------|
| my r replaytv | | Preferences | Help | Logout |
| Manual Record | | Channel Guide | Replay Guide | Find Shows |
| Single Recording | | Repeat Recording | | |
| Start Date | Mar | 7 | 2001 | } Recording duration: |
| Start Time | : | AM | | |
| End Time | : | AM | | |
| Channel | 0 OXYGEN | | | |
| Quality | Extended | | | |
| Guaranteed | Yes | | | |
| <input type="button" value="Submit Request"/> | | | | |
| 450 | | | | |
| Copyright Policy Terms and Conditions Privacy Policy FAQ | | | | |

FIG. 24A

my  replaytv

Channel GuideFind ShowsManual RecordReplay Guide

Preferences
Help
Logout

Manual Record

Single RecordingRepeat Recording

3h 45m available at medium quality
as of last connection

Days☐ Mon☒ Tue☐ Wed☐ Thu☐ Fri☐ Sat☐ Sun

Start Time7:58 PM ▾End Time11:02 PM ▾

Channel4 KRON ▾

QualityStandard ▾

GuaranteedYes ▾

Submit Request

452

FIG. 24B

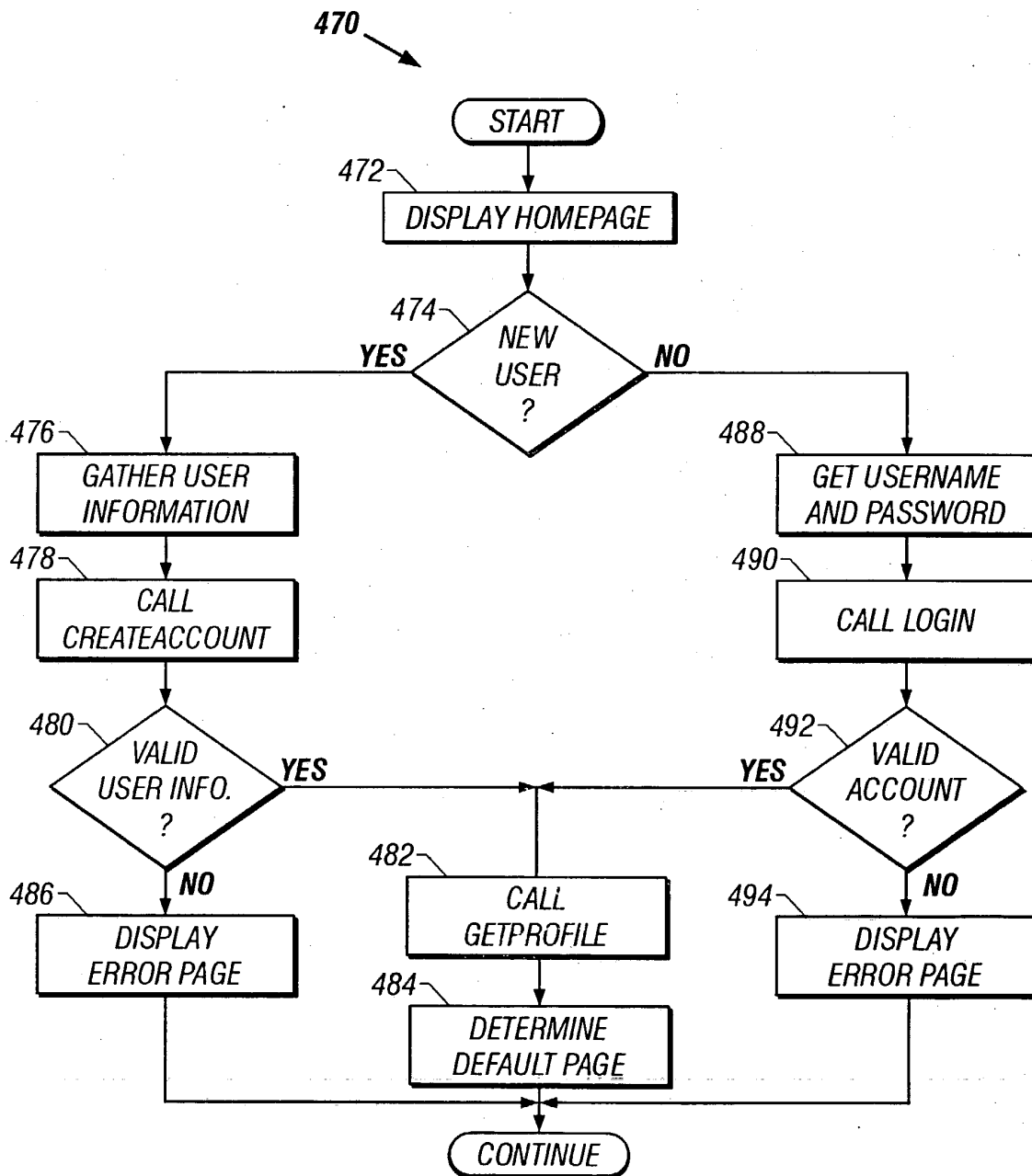


FIG. 26

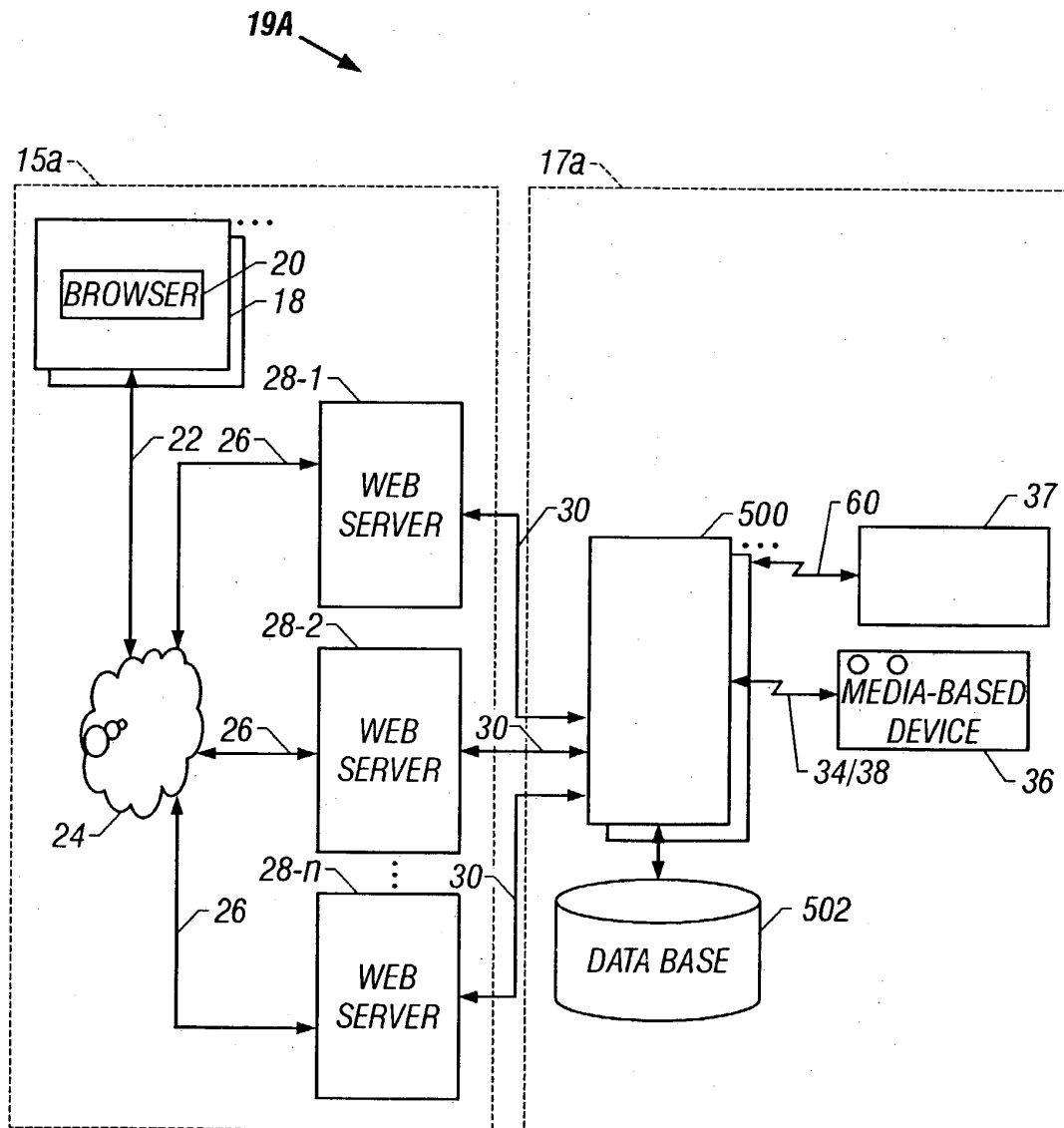
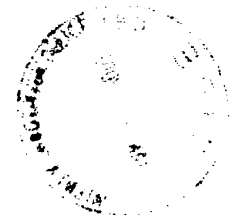


FIG. 27

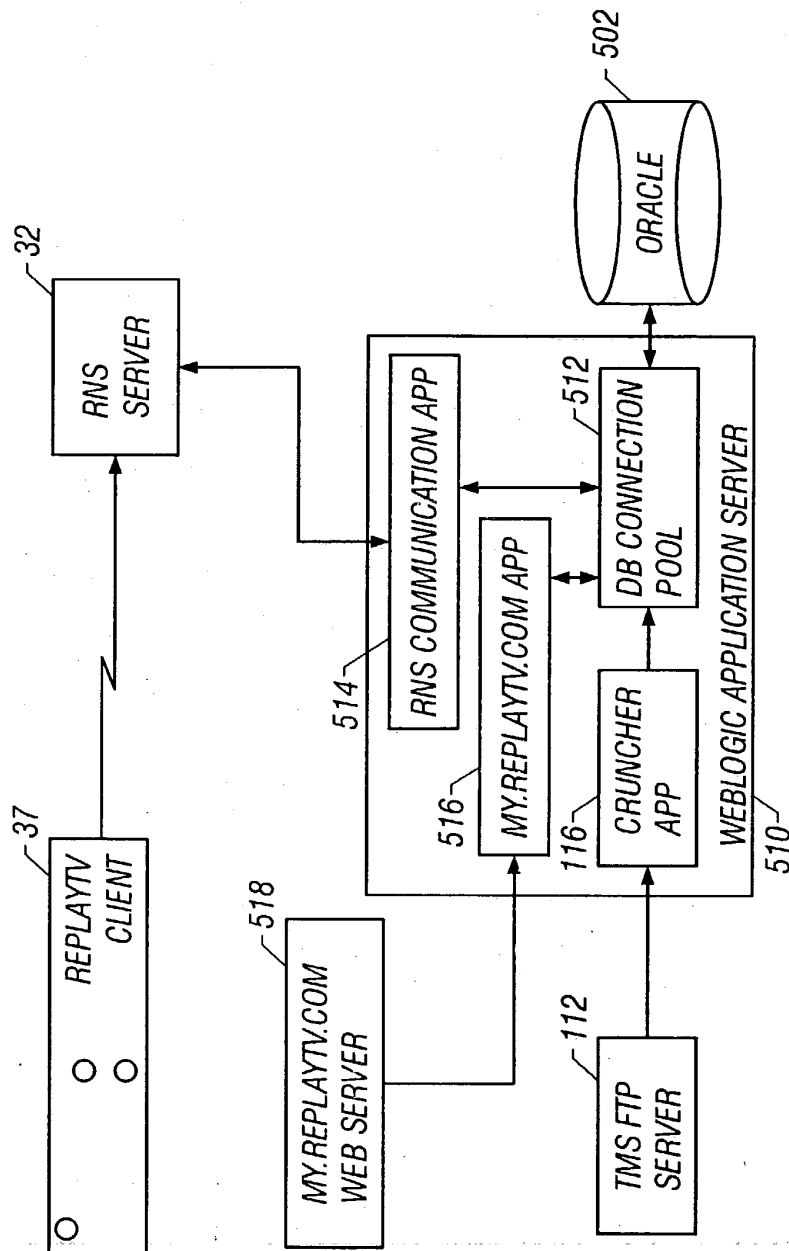


FIG. 28

550 →

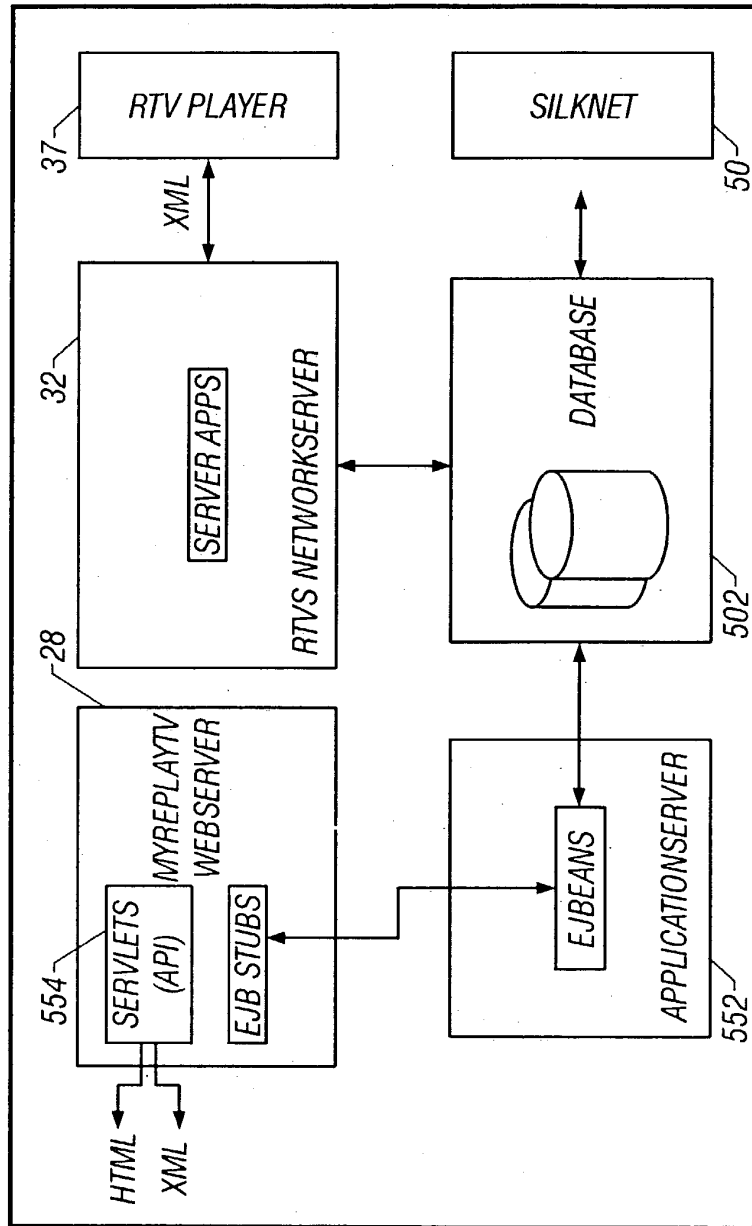


FIG. 29

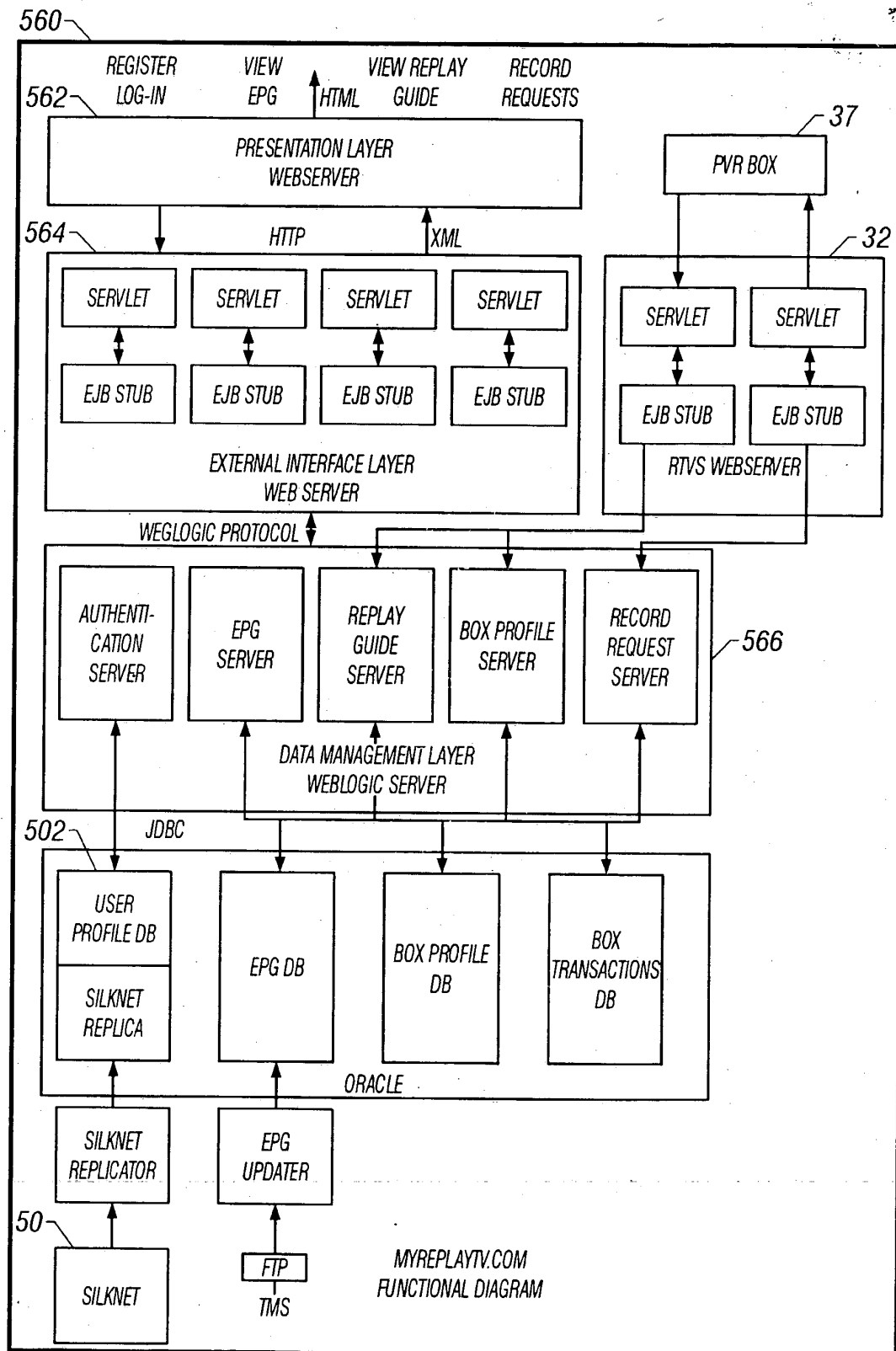


FIG. 30

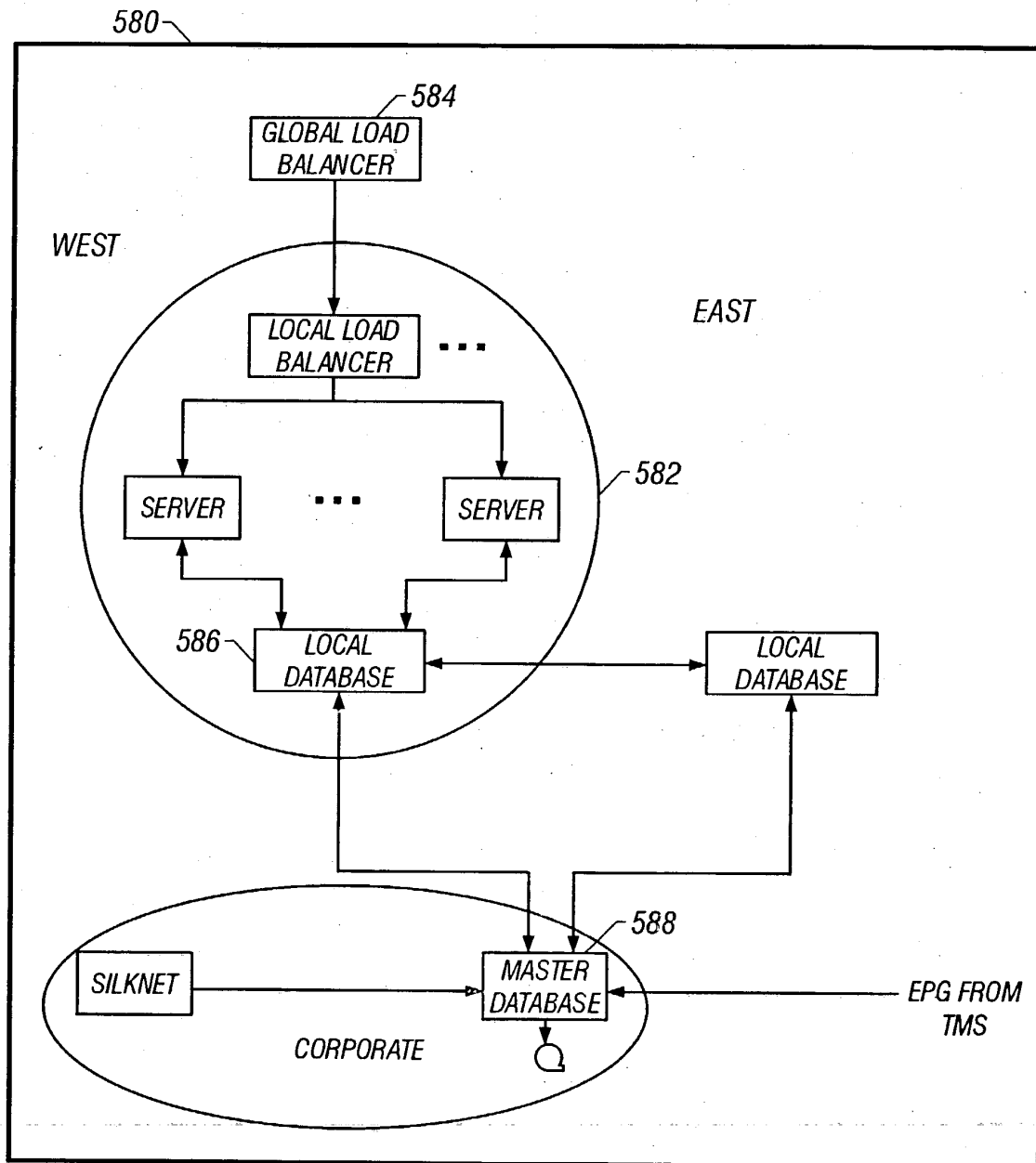


FIG. 31